HB 3126 Advancement in Stem Cell Cures and Therapies Act

Annual Stem Cell Research Report

December 2016

This report is submitted by the following:
Terry Cline, Ph.D.
Commissioner
Secretary of Health and Human Services

Tina R. Johnson, MPH, RN
Deputy Commissioner, Community and Family Health Services

Lisa Caton, MS, RN
Director, Screening and Special Services

HB 3126 Advancement in Stem Cell Cures and Therapies Act

Introduction

HB 3126 Advancement in Stem Cell Cures and Therapies Act was enacted into law in November 2008. This legislation was authored in the House by Representatives Enns, Cox, Dank, Faught, McAffrey, McDaniel (Jeannie), Renegar, Rousselot, Sears, Steele, Shelton and in the Senate by Senator Crain.

This bill was enacted to encourage stem cell research in the State of Oklahoma because stem cells are recognized to have great potential for treatment of life-threatening and debilitating diseases.

The bill defines "human embryo" as a "living organism of the species Homo sapiens at the earliest stage of development, including the single-cell stage that is not located in the body of a woman." It also provides for research on human tissue regeneration and human disease using adult stem cells and stem cells obtained from umbilical cord blood and amniotic fluid to be conducted in the state provided that the research is performed safely and ethically, using only embryonic stem cell lines created prior to August 1, 2001, and in accordance with federal law as it existed on November 1, 2007. The bill states when research is performed in accordance with the Advancement in Stem Cell Cures and Therapies Act no person or governmental body shall "restrict public funds designated for the stem cell research or obstruct or provide disincentives for the stem cell research." In addition, the State Department of Health shall establish a reporting system that collects information regarding all activities carried out.

The State Department of Health established rules in March 2009 to assist organizations engaged in stem cell research with reporting requirements. The State Department of Health provides an annual report to the Governor, President Pro Tempore of the Senate and Speaker of the House. The University of Oklahoma Health Sciences Center and the Oklahoma Medical Research Foundation are currently the only institutions in the state of Oklahoma engaging in stem cell research.

Stem Cell Research Report 2016

Provider	Project
Board of Regents of the University of Oklahoma Health Sciences Center	
	Doublecortin-Like Kinase-1 as a Marker and Indicator of Treatment Response for Intestinal Stem Cells in Barrett's Esophagus and Progression to Esophageal Adenocarcinoma
	Expression Patterns of Stem Cell Marker Doublecortin and CaM Kinase-like-1 (DCAMKL-1) in Human Pancreatic Adenocarcinoma
	Cancer Stem Cell Markers in Hepatocellular Carcinoma
	Transplantation of Umbilical Cord Stem and Progenitor Cells
	Research Sample Repository for Allogeneic Hematopoietic Stem Cell Transplantation and Marrow Toxic Injuries
	A Research Database for Hematopoietic Stem Cell Transplantation and Marrow Toxic Injuries
	A Trial of Tandem Autologous Stem Cell Transplants +/- Post Second Autologous Transplant Maintenance Therapy Versus Single Autologous Stem Cell Transplant Followed by Matched Sibling Non-Myeloablative Allogeneic Stem Cell Transplant for Patients with Multiple Myeloma
	A Multicenter Study of Hematopoietic Stem Cell Donor Safety and Quality of Life
	In Vitro Characterization of Healthy and Diseased Bladder and Ureteral Tissues
	Development of Human T Cells In Vitro
	Metabolic Alterations in the Human Umbilical Vein Endothelial Cells from Offspring of Diabetic and Pre-eclamptic Pregnancies
	Influence of Maternal Diabetes Mellitus on Umbilical Endothelial Cell Micro-Ribonucleic Acid Expression
	Bioengineering of the Human Umbilical Vein for Tissue Engineering Nerves and Tendons
	Establishment of Adenoid Cystic Carcinoma Stem Cell Lines: Role of c-MYB and Wnt Pathway in Cell Line Maintenance
	Pancreatic Stem Cells and Cancer

Provider	Project
	A Randomized, Prospective, Double-Blind, Placebo-Controlled, Phase 3 Study of US-ATG-F Prophylaxis as a Supplement to Standard of Care Prophylaxis to Prevent Moderate to Severe Chronic Graft Versus Host Disease (GVHD) in Adult Acute Myeloid Leukemia, Acute Lymphoid Leukemia, and Myelodysplastic Syndrome Patients after Allogeneic Stem Cell Transplantation from Unrelated Donors
	Inter-Alpha Inhibitor Proteins Reduce the Toxic Effects of Histones In Vitro
	If the Male Partner has Low Strict Kruger Morphology, Should the Couple Still Undergo Intrauterine Insemination Versus Move on to In Vitro Fertilization?
	Assessment of Allogeneic Hematopoietic Stem Cell Transplantation in Medicare Beneficiaries with Myelodysplastic Syndrome and Related Disorders
	Documentation of Novel Keratoconus Markers: In Vitro and In Vivo
	Expression Patterns of Stem Cell Marker Doublecortin and CaM Kinase Like-1 (DCAMKL-1) in Colorectal Polyps
	Comparison of MicroRNA Results Between Umbilical Cord Endothelial Cells and Serum in Children
	A Multi-Center, Phase III, Randomized Trial of Reduced Intensity Conditioning (RIC) and Transplantation of Double Unrelated Umbilical Cord Blood (dUCB) versus HLA-Haploidentical Related Bone Marrow (Haplo) for Patients with Hematologic Malignancies
	Multicenter Safety Study of Unlicensed, Investigational Cryopreserved Cord Blood Units (CBUs) Manufactured by the National Cord Blood Program (NCBP) and Provided for Unrelated Hematopoietic Stem Cell Transplantation of Pediatric and Adult Patients
	Targeting the Cancer Stem Cells in Oral Cancer
	The Gastrointestinal Stem Cell Response to Injury
	A Randomized Double-Blind Phase III Study of Ibrutinib During and Following Autologous Stem Cell Transplantation Versus Placebo in Patients with Relapsed or Refractory Diffuse Large B-Cell Lymphoma of the Activated B-Cell Subtype
	Effect of Body Mass Index on Response to Therapy in Multiple Myeloma Patients Receiving Autologous Stem Cell Transplant with Melphalan-based Conditioning Regimen
Oklahoma Medical Research Foundation	
	Induced Pluripotent Stem Cells to Understand Influence of B-Lymphocyte Kinase (BLK) Variants on Early B Cell Function

Provider	Project
	Systemic Lupus Erythematosis (SLE) Associated B-Lymphocyte Kinase Polymorphisms in B Cell Development: Use of Systemic Lupus Erythematosis Patient induced Pluoripotent Stem Cells (iPSC)
	Genetic and Molecular Characterization of Rare Genetic Disorders